XII.—NOTES ON ORIENTAL DIPTERA.

I.—NOTE ON *SPHYRACEPHALA HEARSEYANA* WESTWOOD, WITH A LIST OF THE ORIENTAL SPECIES OF DIOPSINÆ.

By E. Brunetti.

The capture by Dr. Annandale at Lucknow on April 26th this year of *Sphyracephala hearseyana* in great abundance on the roof of a dry drain, brings it to my memory that on December 4th, 1904, I found the same species in the utmost profusion at the old Residency at that city, where the specimens were clustered very thickly together on the inside walls of the ground floor of that deserted building. On being disturbed, they hovered for a moment or two, and then settled again. The same species was found by me at Cawnpore a few days earlier, there too in extreme profusion, on the shady side of, and beneath, a low arch spanning a nearly dry ditch by the main road. I thought the blackness on the wall was only dirt, until my native servant called my attention to the insects, of which I took a large supply,—this species being the only one I have myself taken in the East.

The short thick eye-stalks easily separate this species (and genus) from all other Oriental Diopsids, except the congeneric *cothurnata* Big., which is separated from it by its wings being marked instead of quite clear as in *hearseyana*.

It would appear that the species of this family are addicted to collecting in swarms on occasion, as Doleschall, writing in 1856, mentions *Diopsis dalmanni* Wied. (*attenuata* Dol.) as swarming over stagnant water at Djokjokarta, Java; while Westwood, still earlier (1837), speaks of *Teleopsis sykesii* Gray (*Diopsis id.* of Westwood) as swarming at Hurreechunderghur, in the Western Ghauts of the Deccan (altitude 3,900 feet); its habitat being woody spots in ravines or woody hillsides, where the flies were to be found clustering together on the rocks illumined by the sun or hovering in such sun rays as pierced the foliage.

Twenty-three species appear to be Oriental, distributed amongst *Diopsis*, *Teleopsis* and *Sphyracephala*, all of which are legitimate genera; but it appears to me impossible, or at any rate inadvisable, to subdivide *Diopsis* or *Teleopsis*, especially on such variable and difficult characters to estimate with certainty as the length of the eye-stalks, thoracic and scutellar spines, etc., as has been done by Rondani in establishing *Diasemopsis* and *Hexechopsis*.

One of the above-mentioned twenty-three species is *Diasemopsis rufithorax* Big., represented by a single example in the Indian Museum Collection; its name appears to be merely a "*nomen nudum*," as I can find no description of it anywhere.

A second species by the same author, the description of which is also untraceable, is *Diasemopsis fenestratus*, likewise in the Indian Museum Collection, but this latter species is certainly only *Diopsis quadriguttata* Wlk.

Besides the truly Oriental species, *Diopsis arabica*, from Arabia, is described by Westwood.

To those who desire to study this very interesting group may be recommended Westwood's monograph of the species known up to 1837 (including *Achias*, a genus now removed from this sub-family to the *Ortalinæ*), published in the Trans. Linnean Soc., Lond., vol. xvii, which volume also contains a short supplement by the same author, giving a few additional species.

In the "Annales" of the French Entomological Society, vol. iv (series 5), Bigot gives a list of the known species up to 1874.

Van der Wulp describes the Javan species in Tijd. voor Ent., vol. xl, 181, with a plate. A revision of the synonymy shows some alterations from this author's South Asian Catalogue, and the following list of species incorporates, I think, the latest results :—

DIOPSIS L., 1775, Diss. Upsal.

1. *dalmanni* Wied., 1830. Ausser. Zweifl., ii, 560; pl. x-a, 4.
   Also figured by Westwood, Tr. Linn. So., xvii, 309; pl. ix, 17; and pl. xxviii, 8.
   (*attenuata* Dol.) 1856, Nat. Tijd. Ned. Ind., x, 413; pl. viii, 2.
   (*latimana* R.) 1875, Ann. Mus. Gen., vii, 445.
   (*lativola* R.) 1875, Ann. Mus. Gen., vii, 446.
   Java, Sumatra Borneo.
2. *confusa* Wied., 1830. Ausser. Zweifl., ii, 563.
   (*ichneumonea* F.) 1805, Antl., 201.
   nec D. ichneumonea L., which is an African species.
   Sumatra. Also occurs on the Congo and in Angola.
3. *circularis* Macq., 1835. Hist. Dipt., ii, 486.
   Figured by same author in his Dip. Ex., ii, 3, 239; pl. xxxii, 1.
   Java.
4. *subfasciata* Macq., 1843. Dip. Ex., ii, 3, 238; pl. xxxii, 3.
   Java.
5. *subnotata* Westw., 1848. Cab. Or. Ent., 37; pl. xviii, 2.
   (*argentifera* Big.) Ann. Soc. Ent. Fr. (5), iv, 112.
   Celebes, Philippines.

Four specimens of this species are in the Indian Museum Collection (one being named by Bigot as his *argentifera*) from Tenasserim, Margherita and Sadiya.

6. *indica* Westw., 1837. Tr. Linn. Soc., xvii, 299 ; pl. ix, 6.
   (*westwoodi* De Hann in Westw.) Cab. Or. Ent., 37 ; pl. xvii, 1.
   (*apicalis* Dol.) Nat. Tijd. Ned Ind., x, 413 ; pl. ix, 3.
   (*graminicola* Dol.) *loc. cit.*, xiv, 417.
   Java.
7. *quinqueguttata* Wlk., 1857. Proc. Linn. Soc., i, 36 ; pl. ii, 7.
   Mount Ophir ; Borneo.
8. *quadriguttata* Wlk., 1857. Proc. Linn. Soc., i, 37 ; pl. ii, 6.

Specimens of this species are in the Indian Museum Collection from Tenasserim, Margherita, Kurseong and Bhim Tal (4,500 feet), the two specimens from the last locality having been captured by Dr. Annandale between September 19th and 22nd, 1906. Dr. Annandale tells me that the individuals of this and probably other species hover over broad-leaved plants in shady places in the jungle and often alight singly or in pairs on the leaves, on which they run about very much like ants.

Diasemopsis fenestrata Big., the type of which is in the Indian Museum Collection, from Margherita, appears to be a "*nomen nudum*" and in any case it is a synonym of *quadriguttata* Wlk.

9. *discrepans* Wlk., 1857. Proc. Linn. Soc., i, 134.
   Borneo.
10. *detrahens* Wlk., 1860. Proc. Linn. Soc., iv, 161.
    Macassar (Celebes).
11. *villosa* Big., 1874. Ann. Soc. Ent. Fr. (5), iv, 114.
    Borneo.
12. *ferruginea* Roder., 1893. Ent. Nach., xix, 235.
    Ceylon.

TELEOPSIS Rond., 1875. Ann. Mus. Gen., vii, 443.

1. *sykesii* Westw., 1837. Tr. Linn. Soc., xvii, 310 ; pl. ix, 18, 19.
   (*Diopsis id.* ♂ ♀.)
2. *fallax* Big., 1874. Ann. Soc. Ent. Fr. (5), iv, 111. (*Diopsis.*)
   Borneo.
3. *belzebuth* Big., 1874. Ann. Soc. Ent. Fr. (5), iv, 113. (*Diopsis.*)
   Borneo.
4. *breviscopium* Rond., 1875. Ann. Mus. Gen., vii, 443.
   Borneo.
5. *longiscopium* Rond., 1875. Ann. Mus. Gen., vii, 444.

Borneo. A specimen in the Indian Museum Collection from Tenasserim is probably this species.

6. *fulviventris* Big., 1880. Ann. Soc. Ent. Fr. (5), x, 94.
   India. Type in the Bigot Collection.
7. *motatrix* Ost. Sack., 1882. Berl. Ent. Teit., xxvi, 236, fig. 13 (wing).
   Philippines.

8. *selecta* Ost. Sack., 1882. Berl. Ent. Teit., xxvi, 236, fig. 13 (wing).
   Philippines.
9. *rubicunda* V. der Wulp, 1897. Tijd. v. Ent., xl, 196; pl. viii, 6.
   Nias (Java).

In the Indian Museum Collection is a specimen of *Teleopsis* from Tenasserim which does not appear to be any of the described species.

SPHYRACEPHALA Say., 1828. Amer. Entom., iii, pl. 52.

1. *hearseyana* Westw., 1884. Tr. Entom. Soc. Figured by him in Cab. Or. Ent., pl. xviii, 4.

Bengal; Lucknow; Cawnpore. A single specimen from Bhim Tal, taken by Dr. Annandale between September 22nd and 27th, 1906, is in the Indian Museum Collection.

2. *cothurnata* Big., 1874. (5) iv, 115. (*Diopsis.*)
   Celebes; Philippines.

Diopsis trentepohlii Westw. in Trans. Linn. Soc., xvii, 546; pl. xxviii, 6, introduced into Van der Wulp's Catalogue as from East India, is an African species (Guinea), as noted in the author's corrections to his Catalogue in Tijd. v. Ent., xlii.

II.—PRELIMINARY REPORT ON A COLLECTION FROM SIMLA

made in April and May 1907.

By E. BRUNETTI.

The specimens dealt with in this report are from places of various altitude in the vicinity of Simla, and were captured by Dr. Annandale and his native assistant this year between April 24th and May 8th. In all, there are about 130 species, and, considering the late season, snow still persisting in sheltered spots, this seems a very satisfactory result for a fortnight's work.

The more I see of the Himalayan Diptera, the more I am inclined to consider that it belongs faunistically to the Palæarctic Region, and not to the Oriental, except as regards the lesser heights on the southern side.

I collected a fair amount of material in 1905 and 1906 during two visits to Mussoorie and one to Darjiling, and the Simla material now under examination strikingly resembles my Diptera from the other two localities, all the collections containing a considerable proportion of European species, these latter, moreover, retaining in most cases their typical form. This is conspicuously the case in the present instance as regards the family Syrphidæ, of which, out of twenty-five species captured, I have identified positively ten as commonly distributed European species, showing no varia-